

REMARKS

The Examiner rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Janky in view of Bi. In response, Applicant has amended claim 1 and respectfully traverses the rejection.

The present invention relates to a system and method that permits a wireless communications network to determine the geographic location of a mobile device, even when the mobile device cannot determine its position on its own. More particularly, a mobile device that is equipped with a GPS receiver, for example, periodically determines its geographic position information. When the mobile device receives a position request from the wireless communications network, it typically responds by transmitting the geographic positioning information to the network. Often times, however, the mobile device cannot obtain the geographic position information because it is located in an area of poor reception, such as in a building. In these cases, a conventional mobile device cannot transmit the geographic position information, or it must transmit outdated information to the network. A mobile device configured according to the present invention, however, recognizes this situation and continuously transmits a tone to the network. The wireless communications network can then determine the position of the mobile device by using the transmitted tone; for example, by using triangulation. Thus, the present invention makes a decision on which information to transmit – position information or tone – based on whether it can or cannot determine position information on its own.

To clarify this, claim 1 has been amended to now recite, “a transceiver ... configured to ... transmit ... geographic position information if the positioner is able to determine the geographic position information ... and ...continuously transmit a tone if the positioner is not able to determine the geographic position information.”

The Examiner admits that the patent to Janky fails to teach that a transceiver continuously transmits a tone that is used by a wireless communications network to determine

the mobile device's position. More importantly, however, Janky also fails to teach or suggest that the mobile device transmits either the position information or the tone depending upon whether the mobile device can determine its own position information. In contrast, Janky simply discloses transmitting a signal responsive to a request only. The system of Janky never contemplates what would occur if the queried device could not determine its own position, but rather, necessarily relies on the assumption that the device will *always* be able to determine its position. "Theoretically, three or more GPS satellites will be visible from most points on the Earth's surface, and visual access to two or more such satellites can be used to determine an observer's position anywhere on the Earth's surface, 24 hours per day." *Janky*, col. 12, ll. 1-5.

Regarding the patent to Bi, it too fails to teach or suggest that the mobile device transmits either the position information or the tone depending upon whether the mobile device can determine its own position information. In Bi, a mobile terminal transmits signals when originating a call or responding to a page. A plurality of location terminals located in the network monitor the communication channels during specific intervals, and determines the geographic position of the mobile terminal. According to Bi, this is done when the mobile terminal originates a call or responds to a page. Like Janky, Bi never contemplates that the mobile terminal transmits either position information or a tone depending upon whether the mobile terminal can determine the position information on its own. In fact, Bi is specifically directed at increasing the chance of determining the position of a mobile terminal where only line-of-sight methods are used without increasing the amount of interference for neighboring mobile terminals.

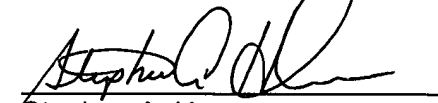
Therefore, both Janky and Bi fail to teach or suggest, alone or in combination, claim 1. As such, Applicant respectfully requests the allowance of claim 1, as well as its dependent claims 2 and 4-10.

The Examiner also rejected claims 11 and 19 under 35 U.S.C. § 103 over Janky in view of Bi. However, claims 11 and 19 have been amended to contain language similar to that of amended claim 1. For reasons similar to those stated above with respect to claim 1, neither

Janky nor Bi teach or suggest, alone or in combination, claims 11 or 19. Accordingly, Applicant respectfully requests the allowance of claim 11, its dependent claims 12-14, and claim 19.

Respectfully submitted,

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